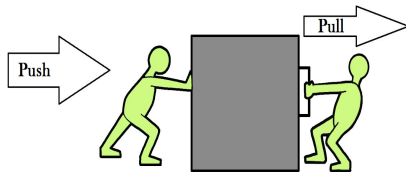


## Glossary

**Forces:** is a push or pull acting upon on object as a result of its interaction with another object.



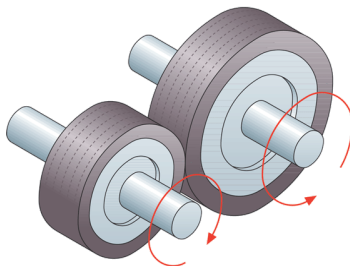
**Contact forces:** Force that requires two pieces of matter to touch.

### CONTACT FORCES

- Force produced by direct contact of bodies is known as contact force.
- It may be of pull type or push type.

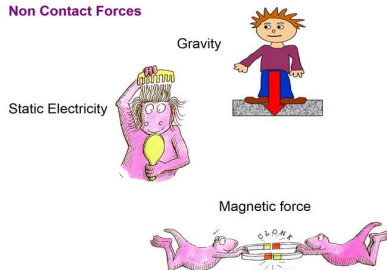


**Friction:** force of resistance to motion between two surfaces moving over each other.

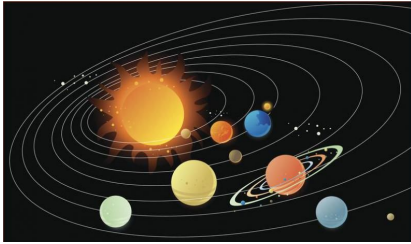


**Non- Contact Forces:** Force that acts at a distance, three examples of non-contact forces are gravity, electric forces, and magnetic forces.

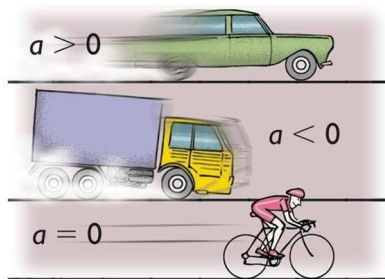
### Non Contact Forces



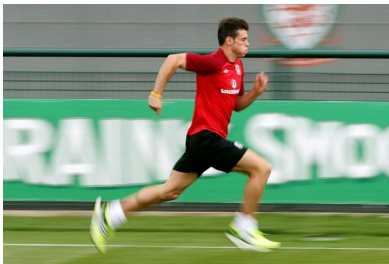
**Gravity:** is a force that holds things to the Earth's surface and prevents things from floating off into the atmosphere.



**Acceleration:** rate at which velocity changes with time of both speed and direction.



**Speed:** is a measurement of how fast an object moves relative to a reference point. It does not have a direction and is considered a magnitude or scalar quantify.



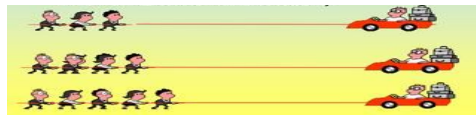
**Newton's First law:** law who says that an object will stay in uniform motion unless a net force acts on the object. Without that force an object at rest will stay at rest. Antes object in motion will keep the same speed and direction.



**Inertia:** the resistance of any physical object to any change in its state or motion.



**Newton's Second law:** law who describes how acceleration, mass, and force are related. Says that the same force will cause an object with small mass to accelerate more than an object with large mass. More force more acceleration



**Simple machine:** machine made up of one or two parts. It is used to modify the forces manually.

### Simple Machines



Lever



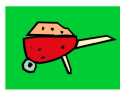
Inclined Plane



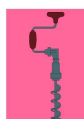
Wedge



Pulley

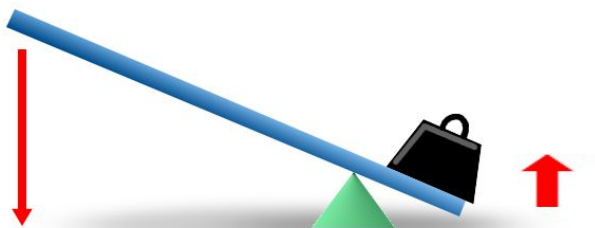


Wheel and Axle



Screw

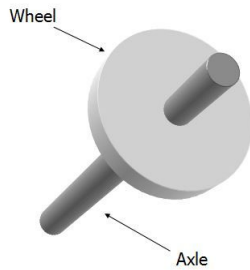
**Lever.** It is a type simple machine in which a bar moves around a fixed point or support called fulcrum.



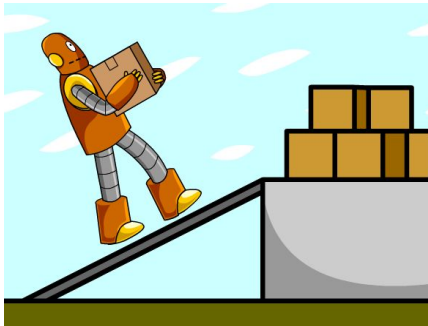
**Pulley.** It is a simple machine consisting of a rope or cable that runs around a grooved wheel.



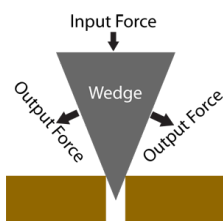
**Wheel And axle.** It is a simple machine made up of a circular object attached to a bar. This machine reduces the amount of force needed to do work.



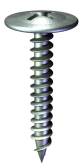
**Inclined plane:** It is a simple machine that consists of a flat surface with one end higher than the other.



**Wedge:** It is a simple machine that can be made of one or two inclined planes. Some wedges, such as an axe, are made of two inclined planes placed back to back.



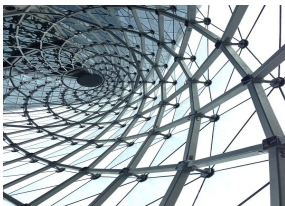
**Screw:** It is a simple machine consisting of a smooth cylinder with a tiny inclined plane wrapped around it.



**Complex machine.** It is a machine made up of two or more simple machines that make your work easier to do



**Structures.** Are made up of several parts that support weight. The weight is distributed among the parts to make the structure strong and stable.



**Mechanism:** consist of two parts or more operating parts working together. For example, a bicycle transmission is made up of a large gear and smaller gear joined by a chain.

